PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	:	
Maximilian ARZBERGER	:	Confirmation No.: 2823
Application No. 10/786,601	:	TC/Art Unit: 3671
Filed: February 26, 2004	:	Examiner: Meredith Petravick
For: CUTTING DEVICE FOR CUTTING TRENCHES IN THE GROUND	:	Atty Docket: P69484US0

DECLARATION UNDER 37 CFR § 1.132

Mail Stop AMENDMENT
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

I, JOSEF HAAS, declare that:

1. I am the holder of a university degree ("Diplom-Ingenieur") in mechanical engineering from Technische Universität München (Technical University Munich) in Munich, Germany.

2. I have worked for over 20 years in the design and construction department of Bauer Maschinen GmbH, which is a manufacturer of underground construction machines and is the assignee of this application.

3. I am an expert in underground construction engineering.

4. I have read, am familiar with, and understand the Office Action dated December 1, 2005 issued in connection with this application and the prior art references cited therein.

5. The claimed invention relates to a trench wall cutter, that is, a device for making foundation elements. Thus, the claimed invention relates exclusively to underground engineering.

6. In contrast, the apparatus disclosed by U.S. Patent No. 4,120,106 to Smith ("Smith") is not a machine for underground engineering, but for road construction engineering.

7. Underground engineering and road construction engineering are two completely separate fields of civil engineering, and even an expert in underground engineering usually has only limited knowledge of road construction equipment. Consequently, a person of ordinary skill in the field would not as a matter of course include the features of Smith's road construction device in a trench wall cutter.

8. U.S. Patent No. 4,694,915 to Bauer ("Bauer") relates to a state-of-the-art trench wall cutter. In such a trench wall cutter, two pairs of cutting wheels are provided at the bottom of a frame 5, wherein the left-hand side cutting wheels rotate counterclockwise and right-hand side cutting wheels rotate clockwise (see Figure 1 of Bauer). These respective directions of rotation of the cutting wheels 11 are clearly marked with arrows in Bauer's Figure 1.

9. Due to the chosen directions of rotation, the cutting wheels 11 of Bauer serve two purposes. First of all, they cut and loosen soil material located below the trench wall cutter. Secondly, they also convey the loosened earth material and transport it out of the trench.

10. In known trench wall cutters such as Bauer's, the direction of rotation of the cutting wheels cannot simply be switched over, since this would disrupt the conveying mechanism of the cutting wheels. If the direction of rotation were to be changed, the cutting wheels would transport the loosened soil material away from the suction device 7, resulting in a jam of the trench wall cutter in the ground.

11. A mode of rotation where the left-hand cutting wheels rotate counterclockwise and the right-hand cutting wheels clockwise is also provided in the remaining documents cited in the Office Action as disclosing trench wall cutters (*cf.* Endo (see arrows in Figure 2), Sourice (see arrows in Figure 1), and Charlier (see arrows in Figure 1)).

12. Consequently, it is my conclusion, based on my expertise in underground construction engineering and my evaluation of the prior art cited in the Office Action, that the statement at page 4, paragraph 3, of the Office Action that "it would have been obvious to replace the cutters of Bauer with the cutters of Smith in order to provide for a more efficient operation of the device in two directions as suggested in Smith" is incorrect. If the cutting wheels of Bauer were replaced with the cutting wheels of Smith and the rotation direction were swapped, this would not provide for a more efficient operation but would lead to a jam of the trench wall cutter in the ground, since the conveying mechanism would be disrupted.

13. I understand that willful false statements and the like are punishable by fine or imprisonment, or both (under Title 18, U.S. Code section 1001) and may jeopardize the validity of the application or any patent issuing thereon.

14. All statements made of my own knowledge are true and that all statements made on information and belief are believed to be true.

Date: 02. Feb. 2006 Signed: J. Haas

Josef Haas